



Universiteit
Leiden
The Netherlands

From oscillations to language: behavioural and electroencephalographic studies on cross-language interactions

Von Grebmer Zu Wolfsthurn, S.

Citation

Von Grebmer Zu Wolfsthurn, S. (2023, January 17). *From oscillations to language: behavioural and electroencephalographic studies on cross-language interactions*. LOT dissertation series. LOT, Amsterdam. Retrieved from <https://hdl.handle.net/1887/3512212>

Version: Publisher's Version

License: [Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

Downloaded from: <https://hdl.handle.net/1887/3512212>

Note: To cite this publication please use the final published version (if applicable).

:LOT
633

Sarah Von Grebmer Zu Wolfsthurn

From oscillations to language



From oscillations to language

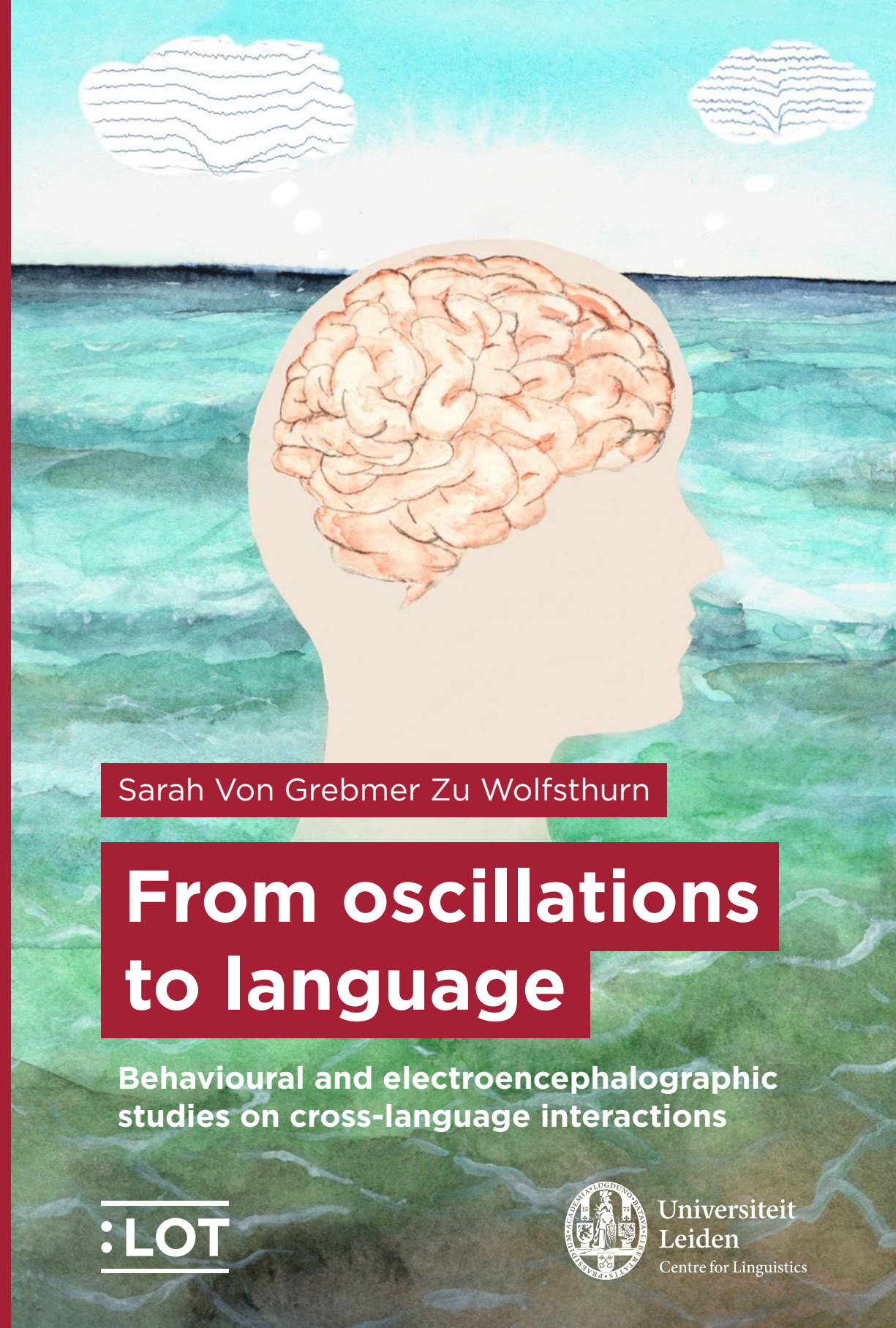
Behavioural and electroencephalographic studies on cross-language interactions

Speaking more than one language has a profound impact on both the mind and the brain. But how does the multilingual brain manage a native language as well as a non-native language, specifically when the non-native language was acquired later in development? In this thesis, we aimed to characterise the multilingual experience of late language learners in three ways. First, we examined how the cross-linguistic influence (CLI) between the native language and the non-native language influenced non-native comprehension and non-native production. Second, we directly compared different multilingual populations to quantify the broader impact of language similarity on both CLI and non-native comprehension and production. Third, we examined whether and how language similarity played a modulating role beyond language processing in terms of higher cognitive functioning, for example inhibitory control. These are critical issues because they speak directly to the notion of how the native language and the non-native language co-exist in the brain. Further, they help us characterise the functional organisation of these languages in the multilingual brain. Across several studies, we systematically explored these three issues by using a range of different experimental paradigms as well as a combination of behavioural and electroencephalographic measures. In this, we pushed the theoretical boundaries of the issues in question and contributed novel evidence to this area of research.

ISBN 978-94-6093-419-3
DOI <https://dx.medra.org/10.48273/LOT0633>



Netherlands Graduate School of Linguistics
Landelijke Onderzoekschool Taalwetenschap



Sarah Von Grebmer Zu Wolfsthurn

From oscillations to language

Behavioural and electroencephalographic studies on cross-language interactions



Universiteit
Leiden
Centre for Linguistics